to that by which numerous contiguous and equally expanding cylinders acquire this configuration; and we must therefore submit with a good grace to give up this as an example of instinct in the Bee. There is, however, a striking exercise of instinct in the construction of the comb, which we are sorry to see that Mr. Samuelson has entirely omitted to mention, namely the alternate arrangement of the cells on the two sides of the comb, by which, as is well known, a considerable economy of space and material is realized. This is a serious omission in a work devoted to the history of the Honey-Bee.

Notwithstanding the defects to which we have alluded, and one or two others of minor importance, Mr. Samuelson has succeeded in producing a valuable contribution to our popular entomological literature, and one which we can safely recommend. He has concluded it most appropriately with two chapters on instinct; but to these we cannot allude, further than to say that they contain a good *résumé* of the subject. The plates illustrating the description of the Bee are well executed, on tinted paper, and will materially assist the unlearned reader in understanding the anatomical details.

Actinologia Britannica: a History of the British Sea-Anemones and Madrepores. By P. H. Gosse, F.R.S. London, Van Voorst, 1858–60.

[Second Notice.]

It is just two years since we called our readers' attention to the appearance of the first parts of this valuable work; and it is with much pleasure that we now announce its completion. There are but few books on the Natural History of these Islands that can in any way compare with Mr. Gosse's 'Actinologia Britannica,' whether we regard the evident care and conscientiousness with which it has been got up or the elegance of the illustrations.

In our previous notice we remarked upon the great strides which have been made in the knowledge of our Helianthoid Polypes within the last few years, mainly in consequence of the strong taste for aquaria, to which Mr. Gosse has most zealously lent a helping hand. A careful comparison of the book now before us with the other standard work on the subject, namely Johnston's 'British Zoophytes,' shows clearly how greatly we are indebted to our author for the progress that has been made in this branch of zoology. In Johnston's volume we find descriptions of thirty-two Sea-Anemones and Corals; Mr. Gosse describes nearly double that number, namely sixty-three, whilst five others are indicated as imperfectly described by other authors, or as doubtful species, and six more, only one of which was known to Johnston, are placed in an appendix as *species incertæ sedis*. If these doubtful species be hereafter established, the number of British Helianthoida will be raised to seventy-four. On further examination it appears that in all eleven of Johnston's species have disappeared from the list, being placed either as synonyms of others or as doubtful species; so that the number of species described as British by Johnston which still retain their full specific rank amounts to only twenty-one. We thus get an addition of forty-two species

to the British list; and of these it appears that no less than thirty-three have been first described by Mr. Gosse, twelve of them in the work now under consideration. Moreover, for the discovery of twelve of the new species we are indebted to our author; so that he may put in a strong claim to be considered the historian of the British Sea-Anemones. Amongst the additions, it is interesting to see that no less than ten species of Coralligenous Polypes occur in our seas, Johnston only describing three, if we omit the *Pocillopora interstincta*, which is inserted by Mr. Gosse with a note of interrogation.

As we have already described the mode in which Mr. Gosse has treated his subject, it will be unnecessary to enter upon its consideration here, further than by stating that he has executed his plan most judiciously throughout; his descriptions are clear and characteristic; and the habits of the animals are treated of in that agreeable manner which must be familiar to all readers of Mr. Gosse's books. The system adopted by Mr. Gosse in conferring English names upon the Sea-Anemones is also worthy of notice, as he has, by a bold manufacture of diminutive names, most happily succeeded in avoiding those sesquipedalian combinations which usually render the so-called English names of animals more uncouth and unpronounceable than their scientific denominations.

The last Part contains an Index and an Introduction, the latter giving a description of the anatomy and physiology of the Helianthoid Polypes, which will be found of great service to the student, especially as so many of the anatomical terms now adopted for these and many other groups of the lower animals are not to be found in any of our zoological text-books. We have already spoken of the great beauty of the illustrations, and may therefore now take leave of Mr. Gosse's book, in the hope that many of our readers will avail themselves of such an excellent guide in the investigation of the interesting order of animals to which it is devoted.

MISCELLANEOUS.

Darwin *on the Origin of Species.*

By Prof. Asa Gray, Cambridge, United States *.

[In our Number for September last we placed before our readers an extract from the forthcoming volume of Prof. Agassiz's 'Contributions to the Natural History of the United States,' relating to the interesting question as to the origin of species, newly raised by Mr. Darwin's well-known book. We now give a notice on the opposite side of the question to that taken by Prof. Agassiz, from the pen of another able naturalist of the United States, for the communication of which we are indebted to Mr. Darwin.—Eds.]

"I can entertain no doubt, after the most deliberate study and dispassionate judgment of which I am capable, that the view which most naturalists entertain, and which I formerly entertained—namely that each species has been independently created—is erroneous. I

* From the 'Atlantic Monthly,' August 1860.